

**CLAIM AMENDMENTS:**

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Currently Amended) A method comprising:

inquiring, from a remote location, a status of an upper-layer communication indicator indicating a point-to-point protocol (PPP) over Ethernet (PPPoE) layer 4 or above communication status, the upper-layer communication indicator displayed at a modem, wherein the status is observable by a visual inspection of the upper-layer communication indicator by an end-user;

entering the status into data storage;

performing a first set of actions when the status indicates that a PPP session has been established ~~valid upper-layer communication~~, the first set of actions including troubleshooting actions; and

performing a second set of actions when the status indicates that a PPP session has not been established ~~invalid upper-layer communication~~, the second set of actions including corrective actions.

2. (Previously Presented) The method, as recited in claim 1, wherein the inquiring comprises:

a service technician from the remote location requesting the end-user to provide the status of a light emitting diode (LED) on a Digital Subscriber Loop (DSL) modem.

3.-5. (Cancelled).

6. (Previously Presented) The method of claim 1, wherein performing the second set of actions comprises a service technician advising the end-user to perform a corrective action to a local configuration.

7. (Previously Presented) The method of claim 1, wherein performing the second set of actions comprises a service technician performing a corrective action at the remote location.
8. (Previously Presented) The method of claim 1, wherein performing the first set of actions comprises sending a service technician to a location of the end-user to perform a set of troubleshooting actions.
9. (Currently Amended) A transceiver positioned at a local location, the transceiver comprising:  
a connection port configured to communicate data signals from a computer positioned at the local location to a remotely located service provider device; and  
a first status indicator configured for visual inspection by an end-user to communicate a point-to-point protocol (PPP) over Ethernet (PPPoE) layer 4 or above communication status between the computer and the service provider device, wherein the first status indicator is configured to trigger a first set of actions including troubleshooting actions by indicating that a PPP session has been established ~~valid upper layer communication~~ and to trigger a second set of actions including corrective actions by indicating that a PPP session has not been established ~~invalid upper layer communication~~.
10. (Cancelled).
11. (Previously Presented) The transceiver of claim 9, wherein the service provider device is a Digital Subscriber Loop Access Multiplexer (DSLAM).
12. (Previously Presented) The transceiver of claim 9, further comprising:  
a second status indicator configured to visually indicate an OSI layer 2 connection status between the computer and the remotely located service provider device.

13. (Previously Presented) The transceiver of claim 12, wherein the second status indicator is a wide area network status indicator.

14. (Previously Presented) The transceiver of, further comprising a second status indicator configured to visually indicate an OSI layer 1 status of the transceiver.

15. (Previously Presented) The transceiver of claim 14, wherein the second status indicator is a power status indicator.

16. (Currently Amended) A method of digital subscriber line service maintenance, the method comprising:

detecting a digital subscriber line (DSL) related troubleshooting event at a remote service terminal that supports an end-user computer having a DSL connection at a local site;

inquiring, from the remote service terminal, a status of a visual upper-layer communication indicator, the visual upper-layer communication indicator displayed at a customer premise equipment (CPE) device and associated with a digital subscriber line (DSL) terminating at the DSL connection of the end-user computer at the local site; wherein the status is observable by a visual inspection of the visual upper-layer communication indicator by an end-user, and wherein the visual upper-layer communication indicator indicates a point-to-point protocol (PPP) over Ethernet (PPPoE) layer-4 or above communication status;

entering the status of the visual upper-layer communication indicator into data storage coupled to the remote service terminal in connection with the DSL related troubleshooting event;

performing a first set of maintenance actions when the status indicates that a PPP session has been established ~~valid upper-layer communication~~, the first set of maintenance actions including troubleshooting actions; and

performing a second set of maintenance actions when the status indicates that a PPP session has not been established ~~invalid upper-layer communication~~, the second set of maintenance actions including corrective actions.

17-25. (Cancelled).